

### REMARKS

Claims 23, 24, and 49 have been amended. Claim 45 has been canceled, without prejudice. Claim 50 has been newly added. Claims 23-26, 29-32, 34, 36-38, 40-44, and 46-50 are pending in the application. Applicants reserve the right to pursue the original claims and other claims in this and other applications.

Applicant acknowledges with appreciation the courtesies extended by the Examiner during the telephone Interview of March 13, 2008. During that interview, Applicant's representative and the Examiner discussed claim amendments to overcome the rejections included in the Office Action mailed February 28, 2008. Applicant has incorporated the suggested amendments into the claims and believes that the pending application is now in condition for allowance.

Claims 23-26, 29-32, 34, 36-38, and 40-49 stand rejected under 35 U.S.C. § 112, first and second paragraphs. Independent claims 23, 24, and 49 have been amended as discussed during the Interview to overcome these rejections by including limitations regarding determining whether confounders are present. For example, claim 23 now recites "determining that a confounder is present in the object when the relative atomic percentages of elements comprising the object are not substantially similar to the relative atomic percentages of elements associated with known explosives and controlled substances." Claims 24 and 49 now recite the limitation of determining "if at least one of an explosive, controlled substance, or confounder is present in the object."

Support for these limitations may be found at least in paragraphs [0023], which describes confounders, and paragraph [0028], which teaches that "the iterative algorithm

can accurately distinguish small amounts of explosive material contained within non-explosive material while reliably rejecting confounders.”

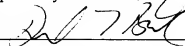
Furthermore, independent claim 23 has been amended to recite “irradiating the object with the neutron particles to cause the object to generate gamma rays” so that the relationship between the neutron particles and gamma rays is clear.

Claim 50 has been newly added and is dependent on independent claim 49. Claim 50 recites the additional steps of “detecting the gamma rays emitted by substances contained within the object in response to the second irradiation; and identifying the location of the explosive or controlled substance within the object based on the detected gamma rays emitted by substances contained within the object in response to the second irradiation.”

In view of the above, Applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

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